

**REMARKS**

The Examiner has withdrawn claims 56, 57, 80, and 81.

The Examiner rejected claims 91 and 97 under 35 U.S.C. §112, second paragraph.

The Examiner rejected claims 1, 18, 51-53, 59-62, 75-77 and 83-86 under 35 U.S.C. §102(e) as allegedly being anticipated by Shiobara *et al.* Patent No. 6,376,100.

The Examiner rejected claims 1, 14, 18, 41, 43, 44, 46, 51-54, 58-62, 75-78, 82-88, 90-94 and 96-98 under 35 U.S.C. §103(a) as allegedly being unpatentable over Christie *et al.* Patent No. 5,668,059; Papathomas *et al.* Patent No. 6,790,473 and Johansson *et al.* Patent No. 6,090,474 in view of Shiobara *et al.* Patent No. 6,376,100.

The Examiner rejected claims 89 and 95 under 35 U.S.C. §103(a) as allegedly being unpatentable over Shiobara *et al.*, Christie *et al.*, Papathomas *et al.*, and Johansson *et al.*, as applied to claims hereinabove and further in view of the Materials Research Society Symposium Proceedings article by Shi *et al.*

Applicants respectfully traverse the claim withdrawals, the §112 rejections, the §102 rejections, and the §103 rejections with the following arguments.

**Claim Withdrawals**

The Examiner has withdrawn claims 56, 57, 80, and 81.

The Examiner argues: "The election of the flexibilizer blend of claims 54 and 78 wherein the first flexibilizer is bis(2,3-epoxy-2-methylpropyl)ether and the thermoplastic is a poly(arylene)ether as denoted in claims 88 and 94 precludes the soluble thermoplastic alone defined in claims 56, 57, 80, and 81. The election were made without traverse in the reply filed on October 6, 2005."

In response, Applicants note that the Examiner's basis for the withdrawal of claims 56, 57, 80 and 81 is that a soluble thermoplastic is precluded. However, thermoplastic in claims 57 and 81 is recited as being insoluble in a solution of the epoxy resins. Therefore, the Examiner's withdrawal claims 57 and 81 is inconsistent with the Examiner's basis for withdrawing claims 57 and 81.

Based on the preceding argument, Applicants respectfully request that the Examiner reinstate claims 57 and 81 for examination.

**35 U.S.C. §112, Second Paragraph**

The Examiner rejected claims 91 and 97 under 35 U.S.C. §112, second paragraph.

The Examiner argues: "Triton K-100 should be identified as polyethylene glycol -p-tert-octylphenyl ether in the specification on page 22, line 23 as substantiated by Chemical abstracts registry no. 9002-93-1. The trade name should be replaced with the chemical name in claims 91 and 97".

In response, Applicants have amended the specification, and claims 91 and 97, in accordance with the Examiner's suggestion.

Based on the preceding argument, Applicants respectfully request that the rejection of claims 91 and 97 under 35 U.S.C. §112, second paragraph be withdrawn.

35 U.S.C. §102(e)

The Examiner rejected claims 1, 18, 51-53, 59-62, 75-77 and 83-86 under 35 U.S.C. §102(e) as allegedly being anticipated by Shiobara *et al.* Patent No. 6,376,100.

Applicants respectfully contend that Shiobara does not anticipate claim 1, because Shiobara does not teach each and every feature of claim 1. For example, Shiobara does not teach the feature: "wherein the composition has a higher fracture toughness, a lower viscosity, and increased thermal shock resistance at a temperature excursion below -40 °C, or combinations thereof than the composition would have if the flexibilizing agent were not present in the composition".

The Examiner argues that Shiobara's stress reducing agent is a flexibilizing agent.

In response, Applicants respectfully contend that irrespective of whether Shiobara's stress reducing agent is a flexibilizing agent, Shiobara does not teach that "the composition has a higher fracture toughness, a lower viscosity, increased thermal shock resistance at a temperature excursion below -40 °C, or combinations thereof than the composition would have if the flexibilizing agent were not present in the composition".

The Examiner has not alleged that Shiobara teaches the preceding feature of claim 1.

Based on the preceding arguments, Applicants respectfully maintain that claim 1 is not anticipated by Shiobara, and that claim 1 is in condition for allowance. Since claims 18, 51-53, and 59-62 depend from claim 1, Applicants contend that claims 1, 51-53, and 59-62 are likewise in condition for allowance.

As to claims 75-77 and 83-86, Applicants note that claims 75-77 and 83-86 depend from claim 41. However, claim 41 was not rejected as anticipated under 35 U.S.C. §102(e) by

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Shiobara. Therefore, claims 75-77 and 83-86 are likewise not anticipated under 35 U.S.C. §102(e) by Shiobara, and are in condition for allowance.

**35 U.S.C. §103(a)**

The Examiner rejected claims 1, 14, 18, 41, 43, 44, 46, 51-54, 58-62, 75-78, 82-88, 90-94 and 96-98 under 35 U.S.C. §103(a) as allegedly being unpatentable over Christie *et al.* Patent No. 5,668,059; Papathomas *et al.* Patent No. 6,790,473 and Johansson *et al.* Patent No. 6,090,474 in view of Shiobara *et al.* Patent No. 6,376,100.

In addition, the Examiner rejected claims 89 and 95 under 35 U.S.C. §103(a) as allegedly being unpatentable over Shiobara *et al.*, Christie *et al.*, Papathomas *et al.*, and Johansson *et al.*, as applied to claims hereinabove and further in view of the Materials Research Society Symposium Proceedings article by Shi *et al.*

Applicants respectfully contend that claims 1 and 41 is not unpatentable over Christie, Papthomas, and Johansson in view of Shiobara, because Christie, Papthomas, and Johansson in view of Shiobara does not teach or suggest each and every feature of claims 1 and 41.

As a first example of why Christie, Papthomas, and Johansson in view of Shiobara does not teach or suggest each and every feature of claims 1 and 41, Christie, Papthomas, and Johansson in view of Shiobara does not teach or suggest the feature: "wherein the composition has a higher fracture toughness, a lower viscosity, increased thermal shock resistance at a temperature excursion below -40 °C, or combinations thereof than the composition would have if the flexibilizing agent were not present in the composition".

The Examiner has not alleged that Christie, Papthomas, and Johansson in view of Shiobara teaches or suggests the preceding feature of claims 1 and 41.

As a second example of why Christie, Papthomas, and Johansson in view of Shiobara does not teach or suggest each and every feature of claims 1 and 41, Christie, Papthomas, and Johansson in view of Shiobara does not teach or suggest the feature: "a flexibilizing agent comprising 2 percent to about 5 percent by weight of said composition".

The Examiner alleges that Christie, col. 11, lines 14-30 discloses a composition having from about 5% to about 30% flexibilizer.

In response, Applicants respectfully contend that the Examiner's argument is not persuasive because Christie, col. 11, lines 27-30 discloses a composition comprised of "the product of a mixture of ethylene glycol and about 5 to about 30 percent, and preferably about 10 percent polyol flexibilizer". Thus the composition disclosed in Christie, col. 11, lines 27-30 is not the composition recited in claims 1 and 41, since the composition recited in claims 1 and 41 requires "a resin material selected from the group consisting of epoxy and cyanate ester resins". Therefore the percent composition of about 5 to about 30 percent disclosed Christie, col. 11, lines 27-30 is not applicable the composition recited in claims 1 and 41.

Moreover, claims 1 and 41 claim the range of 2 percent to about 5 percent by weight. Christie does not disclose that the range of about 5 to about 30 percent is by weight.

As a third example of why Christie, Papthomas, and Johansson in view of Shiobara does not teach or suggest each and every feature of claims 1 and 41, Christie, Papthomas, and Johansson in view of Shiobara does not teach or suggest the feature: "filler material comprising substantially spherical or spheroidal particles".

The Examiner does allege that Christie, Papthomas, and Johansson in view of Shiobara

teaches or suggests the preceding feature of claims 1 and 41.

Based on the preceding arguments, Applicants respectfully maintain that claims 1 and 41 are not unpatentable over Christie, Papthomas, and Johansson in view of Shiobara, and that claims 1 and 41 are in condition for allowance. Since claims 14, 18, 51-54, 58-62, 87-88 and 90-92 depend from claim 1, Applicants contend that claims 14, 18, 51-54, 58-62, 87-88 and 90-92 are likewise in condition for allowance. Since claims 43, 44, 46, 75-78, 82-86, 93, 94 and 96-98 depend from claim 41, Applicants contend that claims 43, 44, 46, 75-78, 82-86, 93, 94 and 96-98 are likewise in condition for allowance.

As to claim 89, Applicants note that claim 89 depends from claim 1 which has been argued *supra* by Applicants as not being anticipated by Shiobara. Therefore, Applicants maintain that claim 89 is not unpatentable over Shiobara, Christie, Papathomas, and Johansson, and further in view of Shi.

As to claim 89, Applicants note that claim 89 depends from claim 41 which has been argued *supra* by Applicants as not being unpatentable over Christie, Papthomas, and Johansson in view of Shiobara. Therefore, Applicants maintain that claim 89 is not unpatentable over Shiobara, Christie, Papathomas, and Johansson, and further in view of Shi.

In addition, Papthomas cannot be used as a prior art reference under 35 U.S.C. §103(a) against claims of the present patent application, as explained *infra*.



Papathomas Cannot be Used as a Prior Art Reference

Applicants respectfully contend that Papathomas cannot be used as prior art in rejecting claims of the present patent application, because "[e]ffective November 29, 1999, subject matter which was prior art under former 35 U.S.C. 103 via 35 U.S.C. 102(c) is now disqualified as prior art against the claimed invention if that subject matter and the claimed invention 'were, at the time the invention was made, owned by the same person or subject to assignment by the same person.'" MPEP 706.02(1)(1). First, the present patent was filed on February 7, 2001 which is after November 29, 1999. Second, the Papathomas patent is being considered by the Examiner as prior art under former 35 U.S.C. 103 via 35 U.S.C. 102(c), because the the Papathomas patent was published on September 19, 2002 which is after the filing date of February 7, 2001 of the present patent application. Third, both the subject matter of Papathomas patent and the claimed invention of the present patent application were, at the time the invention was made, owned by International Business Machines Corporation or subject to assignment by International Business Machines Corporation. Accordingly, Applicant respectfully maintains that Papathomas cannot be used as a prior art reference under 35 U.S.C. 103(a) against claims of the present patent application.

**CONCLUSION**

Based on the preceding arguments, Applicants respectfully believe that all pending claims and the entire application meet the acceptance criteria for allowance and therefore request favorable action. If the Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicants invites the Examiner to contact Applicants' representative at the telephone number listed below. The Director is hereby authorized to charge and/or credit Deposit Account No. 09-0457.

Date: 01/30/2006

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